

WHAT IS CLAIMED IS:

1. A method of manufacturing a solar battery by electrically connecting a plurality of cells to one another using connection members, comprising:

5 a flux applying step of applying a flux to the surfaces of the cells;

a disposing step of disposing the connection members over the adjacent cells to which the flux has been applied;

10 a string step of connecting the connection members to the cells by soldering; and

a cell heating step of heating the cells connected to the connection members.

15 2. The method of manufacturing the solar battery according to claim 1, wherein a heating temperature of the cell heating step is not less than a boiling temperature of the flux.

20 3. The method of manufacturing the solar battery according to claim 1, wherein a heating temperature of the cell heating step is not less than an activating temperature of the flux.

25 4. The method of manufacturing the solar battery according to any one of claims 1 to 3, wherein in the cell heating step, the heating temperature is +140°C or more and +160°C or less, and a heating time is one minute or more

and five minutes or less.

5 5. The method of manufacturing the solar battery
according to claim 4, wherein in the cell heating step, the
heating temperature is +150°C, and the heating time is
three minutes.

10 6. The method of manufacturing the solar battery
according to any one of claims 1 to 3, wherein in the cell
heating step, the heating temperature is more than +160°C,
and a heating time is less than one minute.

15 7. The method of manufacturing the solar battery
according to claim 6, wherein in the cell heating step, the
heating temperature is +200°C or more, and the heating time
is less than 20 seconds.

20 8. The method of manufacturing the solar battery
according to claim 6 or 7, wherein in the cell heating step,
the heating temperature is +250°C or more, and the heating
time is less than ten seconds.

25 9. The method of manufacturing the solar battery
according to any one of claims 1 to 8, wherein in the cell
heating step, the whole cells are heated.

10. The method of manufacturing the solar battery

according to any one of claims 1 to 9, wherein the cell heating step includes: heat release means for preventing a solder which connects the connection members to the cells from being molten.

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11. The method of manufacturing the solar battery according to claim 10, wherein the heat release means is a conveyance belt which conveys the cells and which comes into contact with at least a connection members portion during the conveyance.

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12. The method of manufacturing the solar battery according to claim 11, wherein in the string step, the conveyance belt does not come into contact with the connection members portion, and in the cell heating step, the conveyance belt comes into contact with the connection members portion.

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13. The method of manufacturing the solar battery according to any one of claims 1 to 12, wherein in the string step, hot air is blown against the connection members to perform the soldering, and in the cell heating step, the cells are irradiated with an infrared ray to heat.

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